

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 50.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001325**Date Inspected:** 27-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Jiangyin**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** OBG 6AW, Lift 2 East, OBG 7AE, OBG 7BE**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

OBG 6AW

Base metal surfaces were Pre-blasted for VT inspection on the external surfaces for identification and amendment of defects which require grinding. Sharp edges, gouges and burrs were ground and re-blasting is scheduled for later time.

Lift 2 East

Repairs were performed to the Bottom Plate surface consisting of abrasive blasting to Base metal and an SSPC SP-10 condition and application of Interzinc 22.

OBG 6AW

Base Metal surfaces were re-inspected and rejected due to visible rust and non-compliance with SSPC SP-10 condition. Also concurrent with the inspection process SMR Skyler Guest and Task Leader Mahlon Lindenmuth were present to view corrosion of blasted surfaces and pitted surfaces of base metal. A total of 5 inspections were performed until Base Metal surfaces were in compliance with SSPC SP-10 condition and Interzinc 22 applied. Note: Caulking inside the "U" rib stiffener ends was non-existent in the majority of the ends at the segment end weld seams. Intercure 200HS applied to areas in contact with concrete.

OBG 7AE

External surfaces underwent testing of cure and Pencil hardness of undercoated surfaces prior to application of Interfine 979 "mist" coat. Caltrans QA Lumley observed ZPMC personnel remove the adhesive residues left upon

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the undercoated surfaces resultant from Chloride testing, the areas were scrubbed with MEK and an abrasive pad and thus ZPMC personnel removed the applied undercoating. ZPMC then “masked” the areas and agreed to repair later and then applied “mist” coat Interfine 979 to all external areas after masking was completed.

OBG 7BE

Internal and external Base Metal surfaces were washed and de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting operations.

Lift 2 West

Cross Beam Bottom Plate repairs were performed which consisted of abrasive blasting damaged areas to Base metal and an SSPC SP-10 condition and re-application of Interzinc 22.

OBG 6CE

Internal repairs were viewed and in process which consisted of ZPMC personnel removing dry-spray from undercoated surfaces and re-application of Interzinc 22 to areas of low Dry Film Thickness (DFT).

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

Summary of Conversations:

Caltrans QA Lumley discussed flaking and pitting corrosion of base metal observed on segments which are stored and uncoated in the numerous locations around ZPMC facility with Skyler Guest and Mahlon Lindenmuth.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, (858) 699-7549, who represents the Office of Structural Materials for your project.

Inspected By:	Lumley,James
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Quality Assurance Inspector

Reviewed By:	Carreon,Albert
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QA Reviewer
